

CLAIMS

What is claimed is:

1. A method for slowing down an encoded original audio signal, said original audio signal having an original frequency and original playback speed, said method comprising:

- receiving the encoded original audio signal;
- retrieving frames of the original audio signal;
- replicating frames at a rate according to a desired playback speed; wherein said desired playback speed is less than the original playback speed;
- applying a window function to the replicated frames;
- converting the signal with the windowed replicated frames from digital to analog format; and
- using the original frequency to playback the analog format signal.

2. The method according to claim 1 wherein the encoded original audio signal is encoded in the frequency domain using one of a plurality of encoding schemes, the method further comprising frequency-domain decoding of the encoded original audio signal.

3. The method according to claim 2 wherein said decoding comprises:

- decoding said encoded signal using a decoding scheme corresponding to said one of a plurality of encoding schemes;
- applying an inverse transform to the encoded audio signal; and
- applying an inverse window function.

4. The method according to claim 1 wherein the desired playback speed is a predefined default value.

5. The method according to claim 1 wherein the desired playback speed is a programmable value.

6. A machine-readable storage having stored thereon, a computer program having at least one code section that slows down an encoded original audio signal, said original audio signal having an original frequency and original playback speed, the at least one code section being executable by a machine for causing the machine to perform operations comprising:

- receiving the encoded original audio signal;
- retrieving frames of the original audio signal;
- replicating frames at a rate according to a desired playback speed; wherein said desired playback speed is less than the original playback speed;
- applying a window function to the replicated frames;
- converting the signal with the windowed replicated frames from digital to analog format; and
- using the original frequency to playback the analog format signal.

7. The machine-readable storage according to claim 6 wherein the encoded original audio signal is encoded in the frequency domain using one of a plurality of encoding schemes, the machine-readable storage further comprising code for frequency-domain decoding of the encoded original audio signal.

8. The machine-readable storage according to claim 7 further comprising:

code for decoding said encoded signal using a decoding scheme corresponding to said one of a plurality of encoding schemes;

code for applying an inverse transform to the encoded audio signal; and

code for applying an inverse window function.

9. The machine-readable storage according to claim 6 wherein the desired playback speed is a predefined default value.

10. The machine-readable storage according to claim 6 wherein the desired playback speed is a programmable value.

11. A system that slows down an encoded original audio signal, said original audio signal having an original frequency and original playback speed, the system comprising:

at least one controller capable of receiving the encoded original audio signal;

the at least one controller capable of retrieving frames of the original audio signal;

the at least one controller capable of replicating frames at a rate according to a desired playback speed; wherein said desired playback speed is less than the original playback speed;

the at least one controller capable of applying a window function to the replicated frames;

the at least one controller capable of converting the signal with the windowed replicated frames from digital to analog format; and

the at least one controller capable of using the original frequency to playback the analog format signal.

12. The system according to claim 11 wherein the encoded original audio signal is encoded in the frequency domain using one of a plurality of encoding schemes, the machine-readable storage further comprising code for frequency-domain decoding of the encoded original audio signal.

13. The system according to claim 12 further comprising:

the at least one controller capable of decoding said encoded signal using a decoding scheme corresponding to said one of a plurality of encoding schemes;

the at least one controller capable of applying an inverse transform to the encoded audio signal; and

the at least one controller capable of applying an inverse window function.

14. The system according to claim 11 wherein the desired playback speed is a predefined default value.

15. The system according to claim 11 wherein the desired playback speed is a programmable value.